



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/788,507	02/27/2004	Greg Matthews	011164US2	7421
36031 7590 04/19/2010 PHILIPS INTELLECTUAL PROPERTY & STANDARDS P.O. BOX 3001 BRIARCLIFF MANOR, NY 10510				
EXAMINER				
MENDOZA, MICHAEL G				
ART UNIT		PAPER NUMBER		
3734				
MAIL DATE		DELIVERY MODE		
04/19/2010		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/788,507

**Applicant(s)**

MATTHEWS ET AL.

**Examiner**

MICHAEL G. MENDOZA

**Art Unit**

3734

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 13 July 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-11, 15-17 and 20-34 is/are pending in the application.
- 4a) Of the above claim(s) 8-11, 15-17, 20, 21, 27-31 and 33 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-7, 32 and 34 is/are allowed.
- 6) ☒ Claim(s) 22 is/are rejected.
- 7) ☒ Claim(s) 23-26 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Response to Arguments***

1. Applicant's arguments filed 7/13/2009 have been fully considered but they are not persuasive.
2. The applicant argues that Berthon-Jones does not teach wherein a controller determines a skewness of a patient's inspiratory waveforms from the output of the monitoring system and controls the pressure generating system according to the skewness determination. The examiner disagrees. Berthon-Jones measures a change from an expected respiratory cycle. The change would be skewed from the expected respiratory cycle. In response the skewness, a change in a pressure waveform is triggered (col. 14, lines 25-48).
3. Applicant's arguments, see page 18 of the arguments, filed 7/13/2009, with respect to claim 22 have been fully considered and are persuasive. The 35 USC 112, second paragraph rejection of claim 22-26 has been withdrawn.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claim 22 is rejected under 35 U.S.C. 102(e) as being anticipated by Berthon-Jones 6484719.

6. Berthon-Jones teaches an auto-titration pressure support system comprising: a pressure generating system; a patient circuit having a first end and a second end; a monitoring system; a controller for controlling the pressure generating system, for controlling the base pressured based on the output of the monitoring system, wherein the controller determines a skewness of a patient's inspiratory waveforms from the output of a flow sensor and controls the pressure generating system according to the skewness determination (col. 14, lines 25-48).

***Allowable Subject Matter***

7. Claims 1-7, 32, and 34 are allowable over the prior art of record.
8. Claims 23-26 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
9. The following is a statement of reasons for the indication of allowable subject matter: The prior art of record fails to teach or render obvious the overall claimed invention of an auto-titration pressure support system comprising: a controller is programmed to operated according to one control layer is a set of prioritized control layers, wherein each control layer is the set of Prioritized control layers competes for control of a pressure generating system with the other control layers, and wherein each control layer implements a unique pressure control process for controlling the pressure of the flow of breathing gas output by the pressure generating system; and in combination with other limitations set for in the independent claim.

10. The prior art of record fails to teach or render obvious the overall claimed invention of an auto-titration pressure support system comprising: a controller is programmed to: (1) determine whether the patient is experiencing an apnea/hypopnea based on a pressure signal or the flow signal, (2) set a pressure treatment limit based on a pressure at a time an apnea/hypopnea is detected, (3) cause the pressure generating system to increase the base pressure responsive to a current pressure being below the pressure treatment limit, and (4) cause the pressure generating system to decrease the base pressure responsive to a current pressure being at or above the pressure treatment limit; and in combination with other limitations set for in the independent claim.

11. The prior art of record fails to teach or render obvious the overall claimed invention of an auto-titration pressure support system comprising: wherein shape parameters monitored by a controller during an apnea/hypopnea period include a flatness of an inspiratory portion of a flow waveform, a roundness of the inspiratory portion of the flow waveform, a skewness of the inspiratory portion of the flow waveform, and wherein the controller considers a patient to be experiencing an obstructive/restrictive apnea/hypopnea responsive to the inspiratory portion of the flow waveform exhibiting at least one of an increase in flatness, a decrease in roundness, and an increased skewness, otherwise the controller considers the patient to be experiencing a central apnea/hypopnea, and wherein the controller prevents a pressure increase by the pressure generating system responsive to a determination that the

patient is experiencing a central apnea/hypopnea; and in combination with other limitations set for in the independent claim.

***Conclusion***

12. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL G. MENDOZA whose telephone number is (571)272-4698. The examiner can normally be reached on Mon.-Fri. 9:00 a.m. - 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Todd Manahan can be reached on (571) 272-4713. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/M. G. M./  
Examiner, Art Unit 3734

/Todd E Manahan/  
Supervisory Patent Examiner, Art Unit 3734